

What is claimed is:

1. A method of recording an MPEG compliant transport stream selected by a user on a storage media, comprising:

receiving said transport stream, said transport stream comprising transport stream packets;

removing stuffing bytes from each transport stream packet in said transport stream containing stuffing bytes;

recording all transport stream packets on said storage media; and

recording an entry in a program information file on said storage media indicating that stuffing bytes were removed from said transport stream.

2. The method of claim 1, wherein the step of removing stuffing bytes from each transport stream packet in said transport stream containing stuffing bytes further includes determining which of said transport stream packets are stuffing packets and removing all bytes following a header of said stuffing packets from said transport stream packets determined to be stuffing packets.

3. The method of claim 1, wherein the step of removing stuffing bytes from each transport stream packet in said transport stream containing stuffing bytes further includes determining which transport stream packets contain adaptation fields followed by only stuffing bytes and removing all bytes following said adaptation field from transport stream packets containing adaptation fields followed by only stuffing bytes.

4. The method of claim 1, wherein said transport stream is a single program stream.

5. The method of claim 1, wherein said transport stream is a multiple program transport stream and further including selecting from said transport stream a single program and converting said multiple program transport stream into a single program transport stream containing said selected single program.

6. The method of claim 5, wherein said single program transport stream contains service information table data for all programs in said multiple program transport stream.
7. The method of claim 5, wherein said single program transport stream contains service information table data adapted for an application running in a DVB-MHP or DASE environment.
8. The method of claim 1, wherein said transport stream contains service information table data adapted for an application running in a DVB-MHP or DASE environment.
9. The method of claim 1, further including compressing said transport stream.
10. The method of claim 9, wherein said compressing said transport stream includes changing the bit-rate of said transport stream, removing P-pictures from said transport stream or both changing the bit-rate of said transport stream and removing P-pictures from said transport stream.
11. A method of playing back an MPEG compliant transport stream selected by a user from a storage media, comprising:
 - (a) recording said transport stream by:
 - receiving said transport stream, said transport stream comprising transport stream packets;
 - removing stuffing bytes from each transport stream packet in said transport stream containing stuffing bytes;
 - recording all transport stream packets on said storage media; and
 - recording an entry in a program information file on said storage media indicating that stuffing bytes were removed from said transport stream;
 - (b) reading out each transport stream packet from said transport stream and said entry in said in said program information file; and
 - (c) adding stuffing bytes to each transport stream packet in said transport stream from which stuffing bytes were removed prior to recording based on said entry in said

program information file indicating stuffing bytes were removed from said transport stream.

12. The method of claim 11, wherein the step of adding stuffing bytes to each transport stream packet in said transport stream from which stuffing bytes were removed prior to recording further includes determining which of said transport stream packets were stuffing packets and adding a sufficient number of bytes following a header of said stuffing packets following said header field to increase the length of said transport packet to a MPEG standard length.

13. The method of claim 11, wherein the step of adding stuffing bytes to each transport stream packet in said transport stream from which stuffing bytes were removed prior to recording further includes determining which recorded transport stream packets contain only header fields and adaptation fields and adding to said transport stream packets contain only header fields and adaptation fields a sufficient number of bytes following said adaptation field to increase the length of said transport packet to a MPEG standard length.

14. The method of claim 11, wherein said transport stream is a single program stream.

15. The method of claim 11, wherein said transport stream is a multiple program transport stream and recording said transport stream further includes selecting a single program and converting said multiple program transport stream into a single program transport stream containing said selected single program.

16. The method of claim 15, wherein said single program transport stream contains service information table data for all programs in said multiple program transport stream.

17. The method of claim 15, wherein said single program transport stream contains service information table data adapted for an application running in a DVB-MHP or DASE environment.

18. The method of claim 11, wherein said transport stream contains service information table data adapted for an application running in a DVB-MHP or DASE environment.

19. An apparatus for recording and playing back an MPEG compliant transport stream selected by a user on a storage media, comprising:

means for receiving said transport stream, said transport stream comprising transport stream packets;

means for removing stuffing bytes from each transport stream packet in said transport stream containing stuffing bytes;

means for recording all transport stream packets on said storage media;

means for recording an entry in a program information file on said storage media indicating that stuffing bytes were removed from said transport stream;

means for reading out each transport stream packet from said transport stream and said; and

means for adding stuffing bytes to each transport stream packet in said transport stream from which stuffing bytes were removed prior to recording based on said entry in said program information file indicating stuffing bytes were removed from said transport stream.

20. The apparatus of claim 19, wherein said transport stream is a single program stream.

21. The method of claim 1, wherein said transport stream is a multiple program transport stream and further including means for selecting a single program and means for converting said multiple program transport stream into a single program transport stream containing said selected single program.

22. The apparatus of claim 21, wherein said single program transport stream contains service information table data for all programs in said multiple program transport stream.

23. The apparatus of claim 21, wherein said single program transport stream contains service information table data adapted for an application running in a DVB-MHP or DASE environment.

24. The apparatus of claim 19, wherein said transport stream contains service information table data adapted for an application running in a DVB-MHP or DASE environment.

25. The apparatus of claim 19, further including means for compressing said transport stream.

26. The apparatus of claim 25, wherein said compressing means further includes means for changing the bit-rate of said transport stream, means for removing P-pictures from said transport stream or both means for changing the bit-rate of said transport stream and means for removing P-pictures from said transport stream.

27. An apparatus for recording and playing back an MPEG compliant transport stream selected by a user on a storage media, comprising:

- a transport stream de-multiplexer and decryptor receiving said transport stream, said transport stream comprising transport stream packets, said transport stream de-multiplexer and decryptor adapted to generate a video elementary stream and an audio elementary stream from said transport stream;

- a stream modifier coupled to said transport stream de-multiplexer and decryptor, said stream modifier adapted to receive said transport stream from said transport stream de-multiplexer and decryptor, said stream modifier further adapted to remove stuffing bytes from each transport stream packet in said transport stream containing stuffing bytes;

- a recording apparatus adapted to record all transport stream packets on said storage media, said stream modifier further adapted to send a signal to said recording apparatus, said signal indicating that stuffing bytes were removed from said transport stream and said signal recorded by said recording apparatus;

- a stream de-modifier coupled between said storage apparatus and said transport stream de-multiplexer and decryptor, said stream de-modifier adapted to reading out each

transport stream packet from said transport stream and further adapted to add back all stuffing bytes to each transport stream packet removed by said stream modifier prior to recording based on said entry in said signal indicating stuffing bytes were removed from said transport stream; and

an audio and video decoder and presenter adapted to convert said a video elementary stream and an audio elementary stream to a playable output signal.

28. The apparatus of claim 27, wherein said transport stream de-multiplexer and decryptor further includes a single program transport stream generator adapted to convert said transport stream in the event said transport stream is a multiple program transport stream into a single program transport stream containing a program selected by said user, said single transport stream generator coupled to said stream modifier.

29. The apparatus of claim 28, wherein said single program transport stream contains service information table data for all programs in said multiple program transport stream.

30. The apparatus of claim 28, wherein said single program transport stream contains service information table data adapted for an application running in a DVB-MHP or DASE environment.

31. The apparatus of claim 27, wherein said transport stream contains service information table data adapted for an application running in a DVB-MHP or DASE environment.

32. The apparatus of claim 27, further including a transcoder adapted to compress said transport stream.

33. The apparatus of claim 32, wherein said transcoder is adapted to change the bit-rate of said transport stream, is adapted to remove P-pictures from said transport stream or is adapted to both change the bit-rate of said transport stream and to remove P-pictures from said transport stream.

34. The apparatus of claim 27 wherein said recording apparatus is selected from the group consisting of hard disk drives, optical disk drives, compact disc drives and digital video disk drives.